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RSPA-98-4891-1

BY HAND

Associate Administrator of Hazardous Materials Safety
Research and Special Programs Administration
U.S. Department of Transportation
400 7th Street, S.W.
Washington, D.C. 20590-0001

Attention: DHM-3 1

APPLICATION FOR EXEMPTION

Applicant: Martinair Holland V.A.
P.O. Box 7507
Schiphol Airport
1118-ZG
Amsterdam, Netherlands

In accordance with 49 CFR § 107.105, Martinair Holland V.A. ("Martinair"), hereby petitions the Research and Special Programs Administration ("RSPA") for an exemption from 49 CFR table 172.101, column (9B), Section 173.27(b)(2) and 175.30(a)(1), to the extent necessary to carry certain [REDACTED] that are forbidden for shipment by air or are in quantities greater than those prescribed for shipment by air, in 49 CFR Parts 100 through 178.

In accordance with 49 CFR 107.107, the applicant, Martinair Holland, not being a resident of the United States, designates Frank Costello, counsel at Zuckert Scoutt & Rasenberger, L.L.P. as agent for service.

§ 107.105(c)

Martinair proposes to use the exemption to carry certain [REDACTED]
[REDACTED]

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[REDACTED]

Packaging for air transportation of these explosives under this exemption will comply with that specified under 49 CFR § 173.62, which states that explosives [REDACTED] and that explosives [REDACTED] are to be packed using method [REDACTED]. Packaging method [REDACTED]

[REDACTED]

The basis for this request is that there is a need within the industry to have the ability to transport these commodities by air. Martinair is requesting this exemption to meet this demand. If granted, Martinair will only transport material on Martinair registered cargo only aircraft.

§ 107.105 (c) (2)

The proposed mode of transportation is by cargo aircraft only. Martinair does not believe there are any increased risks if the procedures outlined in this request are strictly complied with.

§ 107.103 (c) (4)

Martinair requests that the exemption be granted for the maximum allowable duration of two years.

§ 107.105(a) and § 107.5

Martinair respectfully requests confidential treatment for certain information within this application. Martinair has listed specific explosives it plans to transport, the manufacturers of such explosives, and other detailed information regarding the transportation process of such explosives. This information is important commercial and client information which if released would significantly damage Martinair's relationship with its client and would cause economic harm to the company by providing competitors with commercially advantageous information. This information comes within the exception in 5 U.S.C. 552(b)(4) for trade secrets and commercial or financial information. This information, being both of a commercial and financial nature, is of a kind that would customarily not be released to the public by Martinair and the release of it would cause substantial harm to Martinair's competitive position. In accordance with § 107.5(a), Martinair has filed, together with the application, a second copy with the confidential information deleted. In addition, the applicant has indicated each page of the original application that contains confidential information by marking "confidential" on each page for which a claim of confidentiality is made.

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§ 107.105 (d)

A grant of exemption will achieve a level of safety equal to that required by the regulations. Martinair is one of the largest and most well respected cargo carriers in the world. Martinair's relevant shipping experience includes 40 years of transporting various cargoes. Since [REDACTED]

[REDACTED]. During 40 years of various cargo transportation and six years [REDACTED] transportation, Martinair has had no accidents or incidents relating to the transportation of hazardous materials. Martinair's lack of incidents or accidents related to the transportation of various cargoes, including [REDACTED], demonstrates Martinair's ability to ship hazardous materials and other types of freight in accordance with the applicable regulations. Martinair proposes to operate its aircraft carrying the explosives under the provisions of the exemption in accordance with the conditions and limitations of Martinair's FAA-approved operations manual.

Martinair will adhere to the following safety control measures to ensure that an adequate level of safety is maintained.

1. Authorized aircraft. The aircraft to be used will be authorized by Martinair's FAR 129 operations specifications.
2. Operations manual. Operations will be conducted in accordance with the conditions and limitations specified in Martinair's operations manual.
3. Maximum weight. Not more than 2,000 pounds total net weight of the explosives will be carried on board any aircraft.
4. Authorized persons on board an aircraft. No person other than a required flight crewmember, an FAA inspector, the shipper or consignee of the material, a representative of the shipper or consignee so designated in writing, or a person necessary for handling the material will be carried on board the aircraft.
5. Advance notice of the FAA Civil Aviation Security Office ("CASO"). Martinair will notify the appropriate CASO at least 24 hours in advance of plans to operate under the exemption. The notification will include the point of departure, intermediate stops, designations, and the approximate time schedule. Alternative notification procedures will be established subject to the written approval of the appropriate CASO.
6. Advance permission from the airport. Martinair will obtain advance permission from the owner or operator of each manned airport where the material is to be loaded or unloaded or where the aircraft is to land while the material is on board. When the destination changes after departure because of weather or unforeseen

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events, permission from the owner or operator of the alternate airport will be obtained as soon as practicable.

7. Flight plan. Martinair will include the following information in the "Remarks" section of each flight plan when the provisions of the exemption are exercised:
 - (a) The classification of each hazardous material on board the aircraft, and
 - (b) The net weight of each class of hazardous material on board the aircraft.
8. Loading and unloading. Loading and unloading operations will comply with the following:
 - (a) The loading and unloading of the aircraft will be conducted at a safe distance from heavily populated areas and from any place of human abode or assembly. However, at an airport where the airport owner or operator, or authorized representative thereof has designated a specific location for loading and unloading, the explosives will not be loaded or unloaded at any other location;
 - (b) During loading or unloading, no person will smoke; carry a lighted cigarette, cigar, or pipe; or operate any devices capable of causing an open flame or spark within 50 feet of the aircraft; and
 - (c) No fuel operations of the aircraft will be performed during loading and unloading of the explosives.
9. Requirements during operation of an aircraft. Operation of the aircraft during takeoff and landing, and en route will be conducted at a safe distance from heavily populated areas.
 - (a) Before movement of the aircraft prior to takeoff, the pilot of the aircraft will notify the control tower of the class(es) of explosive(s) on board.
 - (b) Prior to entering an airport area, the pilot of the aircraft will notify the control tower of the amount and class of explosives on board the aircraft and request the information be relayed to the appropriate airport officials. For airports without operating control towers, the pilot will contact the Flight Service Station nearest the airport of intended landing.
 - (c) When under radar control during the approach and landing phase, the pilot will request appropriate vectors so as to avoid heavily populated areas.

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- (d) Whenever explosives are on board the aircraft, the pilot will ensure that no person on the aircraft will smoke or operate any device capable of causing an open flame or spark.
- 10. Pilot requirements. Martinair will ensure the following with respect to pilots operating aircraft under the exemption:
 - (a) Martinair will ensure that a minimum of two pilots will be on board any multiengine aircraft carrying explosives operating under the exemption;
 - (b) Each pilot will be provided written instructions stating the conditions and limitations of the operations being conducted and the name of the official(s) granting the advance permission of paragraph 6 above, except when a landing permit has been granted by an agency of the Department of Defense for landing at a military installation; and
 - (c) Each pilot of an aircraft being operated under the exemption will have received formal training on the Hazardous Materials Regulations that are applicable to that person's duties and will be thoroughly familiar with the specific requirements of the exemption.
- 11. Attendance of explosives. The explosives will be attended at all times when in Martinair's possession (from the time of receipt from the cosigner until time of receipt by the consignee), unless placed in an explosive storage magazine that is approved by a Federal, State, or local authority, or at a location on a military installation designated by appropriate military authorities.
- 12. Special provisions.
 - (a) A copy of the exemption will be carried on board each aircraft operating under the exemption.
 - (b) Martinair will maintain permanent records of each flight during which explosives are carried under the authority of the exemption. This record will be made available at its principal business office to representatives of the FAA and submitted to the Associate Administrator for Hazardous Materials Safety, upon request. The record for each flight will include:
 - (1) Name(s) of the shipper(s),
 - (2) Name(s) of the consignee(s),
 - (3) Origin airport,

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- (4) En route airport(s),
- (5) Destination airport,
- (6) Shipping name and class of explosive,
- (7) Net weight of each explosive,
- (8) Name of each pilot and any other person(s) on board the aircraft,
- (9) Registration number of the aircraft, and
- (10) Name of the individual representing the owner or operator of each manned airport who granted advance permission for the aircraft to takeoff or land while being operated under the exemption.

The record required by paragraph 12(b) will be maintained current to within 72 hours of each flight under the exemption.

13. Reporting requirements. Any incident involving fire, explosion, or loss of packaging contents or packaging failure will be reported to the Associate Administrator for Hazardous Materials Safety, as soon as practicable.

Martinair believes the proposed exemption provides a level of safety that is equal to that specified in the regulations and is consistent with public interest and will adequately protect the public against the risks of life and property which are inherent in the transportation of hazardous materials in commerce.

Martinair respectfully requests a waiver of the 120-day, and seeks priority processing of this application, set forth are the following supportive facts:

1. [REDACTED]. Contracts are being negotiated, (as this request is being made), with [REDACTED]. If the exemption is not granted in a speedy manner, [REDACTED].
2. There is an immediate need for an airline with Martinair's lift capacity to transport such items requested in this exemption. For prompt processing, Martinair has included with this application a copy of the section of Martinair's Operations Manual, concerning hazardous materials.

Martinair would greatly appreciate your consideration for priority processing in this case.

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Martinair has met all the requirements of § 107.105 in this application and requests an exemption for the carriage of the explosives specified above. If you have any questions or require additional information, please contact us at the telephone or facsimile numbers below.

Respectfully submitted,



Frank J. Costello

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9 DANGEROUS GOODS AND WEAPONS

9.1 DANGEROUS GOODS

9.1.0 INTRODUCTION

Dangerous goods comprise articles or substances which are capable of posing a significant risk to health, safety or to property when transported by air. The carriage of dangerous goods on board a passenger or cargo aeroplane is subject to certain **restrictions**, procedures and instructions in order to eliminate the above mentioned hazards during normal conditions of transport.

The internationally agreed rules, which will ensure that dangerous goods can be transported safely, are reflected in the IATA Dangerous Goods Regulations (IATA DGR). A copy of the latest edition of the IATA DGR is available on board of all **Martinair** aeroplanes for reference by qualified personnel.

The information in this sub-chapter is a summary of the most important aspects related to the transport of dangerous goods.

9.1.1 POLICY

Dangerous goods will only be accepted and carried when they are classified, packed, marked and documented in accordance with the IATA DGR, and supplemented by RLD exemptions and/or Martinair requirements. Although this sub-chapter includes information related to radioactive material, until further notice radioactive material will not be accepted for transportation.

9.1.2 DUTIES AND RESPONSIBILITIES

9.1.2.1 General

Transportation of dangerous goods by air is only permitted when both the shipper and the operator have received an approval from the authorities.

A permanent approval for the transport of dangerous goods by Martinair is specified on the Air Operator Certificate.

9.1.2.2 Shipper's duties and responsibilities

The shipper will ensure that:

- Its personnel is qualified:
- The articles or substances are not prohibited for transport by air;
- The dangerous goods are properly **classified**, packed, marked and labelled: and
- The required details are entered on a signed Shipper's Declaration for Dangerous Goods, wherein it is stated that the goods have been properly prepared for transport.



9.1.2.3 Martinair's duties and responsibilities

Martinair will ensure that:

- Training is provided to all relevant employees, including those of agencies employed to act on behalf of Martinair;
- Each package, overpack and Unit Load Device (ULD) is inspected for leakage or damage and for correct labels and markings when offered for transportation;
- An acceptance checklist is completed which involves a comprehensive check of the package and documentation and the consignment is accepted only if all relevant requirements have been complied with;
- Each package and overpack is inspected for evidence of leakage or damage immediately prior to loading into an aeroplane or into an ULD;
- An ULD is not loaded into an aeroplane unless it has been inspected and found free from any evidence of leakage from, or damage to, the dangerous goods contained therein;
- Leaking or damaged packages and overpacks are not loaded into an aeroplane;
- Any package of dangerous goods found on an aeroplane and which appears to be damaged or leaking is removed or arrangements are made for its removal by an appropriate authority or organization. In this case the remainder of the consignment will be inspected to ensure that it is in a proper condition for transport and that no damage or contamination has occurred to the aeroplane or its load;
- Packages and overpacks are inspected for signs of damage or leakage upon unloading from an aeroplane or from an ULD, and, if there is evidence of damage or leakage the area where the dangerous goods were stowed is inspected for damage or contamination;
- Any contamination found as a result of the damage or leakage of dangerous goods is removed without delay; and
- Dangerous goods are correctly, positioned, segregated and secured aboard the aeroplane.

9.1.2.4 Commander's duties and responsibilities

The commander shall:

- Receive and retain the full written details of all dangerous goods loaded in the aeroplane including their location (Special Load Notification to Commander: NOTOC);
- Sign the NOTOC to acknowledge receipt; and
- Be aware of the actions to be taken in the event of emergencies involving dangerous goods.

9.1.3 CATEGORIES

Dangerous goods are divided into three main categories.

- Dangerous goods acceptable;
- Dangerous goods forbidden; and
- Dangerous goods exempted.

9.1.3.1 Dangerous goods acceptable

Those dangerous goods which may be carried on an aeroplane as cargo provided all of the provisions of the IATA DGR are complied with. Generally they are not permitted in passenger's or crew baggage or as carry-on articles.

9.1.3.2 Dangerous goods forbidden*(a) Dangerous goods forbidden under any circumstances*

These dangerous goods are considered to be too hazardous for transport by air.

(b) Dangerous goods forbidden unless exempted

For some dangerous goods which are normally forbidden for transport by air the States concerned may grant an exemption for carriage. The application for any exemption and the actual shipment is subject to approval by the Martinair inspector dangerous goods.

9.1.3.3 Dangerous goods exempted

The provisions from the IATA DGR do not apply to (a) and (b) below:

(a) Dangerous goods in operator's property

- . Articles and substances which are required to be aboard Martinair aeroplanes in accordance with pertinent airworthiness requirements or for operating reasons:
- . Aerosols, alcoholic beverages, perfumes, colognes, safety matches and liquefied gas lighters carried as catering or cabin service supplies: and
- . Dry ice intended for use in food and beverage service aboard the aeroplane.

(b) Dangerous goods carried by passengers and crew

Dangerous goods are forbidden to be carried in or as passenger's or crew checked baggage or carry-on baggage. Certain articles are, however, exempted on a conditional basis, mostly for practical reasons. These articles and the applicable conditions are listed in the following table.

Security-type attaché cases incorporating dangerous goods, such as lithium batteries or pyrotechnic devices, are totally forbidden.

Disabling devices such as mace, pepper spray, etc. containing an irritant or incapacitating substance are prohibited on the person, in checked baggage and in carry-on baggage.

Dangerous goods shall not be carried in or as passenger's or crew checked or carry-on baggage. • XCCD: as otherwise provided below

Permitted in or as carry-on baggage

Permitted in or as checked baggage

Permitted on one's person

The • • • • • of Martinair is required

The commander shall be informed of the location

YES	YES	•	NO	NO	Alcoholic beverages not • xcoeotng 70% by volume, when packed in receptacles of less than 5 litres. Home made alcoholic distillates are forbidden.
YES	YES	YES	NO	NO	Non-radioactive medicinal or toilet articles (including • erosots) when the total net quantity of all such articles carried by each passenger or crew member does not • xcood 2 kg or 2 litres, and the net quantity of • 8ch single article does not • xcord 0.5 kg or 0.5 litre (see note 1).
YES	YES	NO	NO	NO	Hair curlers containing hydrocarbon gas, no more than one per passenger or crew member, provided that the safety cover is securely fitted over the heating element. These hair curlers shall not be used on board the aeroplane at any time. Gas refills for such curlers are not permitted in checked or carry-on baggage.
YES	YES	•	YES	NO	Carbon dioxide, solid (dry ice) in quantities not • xcoedmg 2 kg per passenger when used to pack perishables in carry-on baggage, provided the package permits the release of carbon dioxide gas (see note 2).
NO	NO	YES	NO	NO	Safety matches or 8 lighter with fuel/fluid fully absorbed in a solid intended for use by an individual. However, 'strike anywhere' matches, lighters with a flammable liquid reservoir containing unabsorbed liquid fuel (other than liquefied gas), lighter fuel and lighter refills are not permitted on one's person nor in checked or carry-on baggage.
YES	YES	YES	NO	NO	Small carbon dioxide gas cylinders worn by passengers for the operation of mechanical limbs. Also spare cylinders of 8 similar size if required to ensure • adequate supply for the duration of the journey.
NO	NO	YES	NO	NO	Radio-isotopic cardiac pacemaker or other devices, including those powered by lithium batteries, implanted into 8 person, or radio-pharmaceuticals contained within the body of 8 person as the result of medical treatment.
YES	YES	•	YES	YES	Small gaseous oxygen or air cylinders required for medical use,
NO	YES	NO	YES	YES	Securely boxed ammunition (cartridges for weapons) for sporting purposes (in Division 1.4 S), in quantities not • xce8ding 5 kg gross weight per passenger for that person's own use, excluding ammunition with • xptosivs or incendiary projectiles. Allowances for more than one passenger shall not be combined into one or more packages.
NO	YES	•	YES	NO	Wheelchairs or other battery-powered mobility devices with non-spillable batteries, provided that the battery is disconnected, the battery terminals are insulated to prevent accidental short circuits, and the battery is securely attached to the wheelchair or mobility device.
NO	YES	•	YES	YES	Wheelchairs or mobility devices with spillable batteries (see note 3).
YES	NO	•	YES	YES	A mercurial barometer or thermometer carried by a representative of 8 government weather bureau or similar official agency (see note 4).
YES	YES	YES	YES	NO	One small carbon dioxide cylinder fitted into 8 self-inflating life jacket plus one spare cartridge.
YES	NO	NO	YES	NO	Heat producing • rticlos such as underwater torches (diving lamps) • rl soldering irons (see note 5).
NO	YES	NO	YES	NO	Small oxygen generator for personal use (see note 6).
YES	YES	YES	NO	NO	Small medical or clinical thermometer which contains mercury, for personal use, when in its protective case.
NO	YES	NO	YES	NO	Insulated packagings containing refrigerated liquid nitrogen not fully absorbed in 8 porous material • d intended for transport, at a low temperature, of non-dangerous products.



Notes applicable to the table:

- ① The term "**medicinal or toilet articles**" is intended to include such items as hair sprays, perfumes, colognes and medicines containing alcohol.
- ② Martinair approval is required for checked baggage only
- ③ Wheelchairs or mobility devices with spillable batteries are acceptable as checked baggage provided that the wheelchair can be loaded, stowed, secured and unloaded **always** in an upright position and that the battery is disconnected, the battery terminals are insulated to prevent accidental short circuits and the battery is securely attached to the wheelchair. If the wheelchair cannot be loaded, stowed, secured and unloaded **always** in an upright position, the battery shall be removed and the wheelchair may then be **carried** as checked baggage without restriction. The removed battery shall be carried in strong, rigid packagings, as follows:
 - Packagings must be leak-tight, **impervious to battery fluid** and be protected **against** upset by securing to pallets or by **securing** them in cargo compartments using appropriate means of **securement** (other than by bracing with cargo or baggage) such as by use of **restraining straps**, brackets or holders;
 - Batteries shall be protected against short circuits, secured **upright** in these packagings and surrounded by compatible absorbent **material** sufficient to absorb their total liquid contents; and
 - These **packagings** shall be marked 'BATTERY. WET. WITH WHEELCHAIR' and be **labelled** with the 'Corrosive' label, and with the 'Package Orientation' label.
- ④ The barometer or thermometer shall be packed in a strong outer packaging, having a sealed inner liner or a bag of strong leakproof and **puncture-resistant** material impervious to mercury, which will prevent the escape of mercury from the package irrespective of its position.
- ⑤ Heat producing articles are allowed only when the heat producing component, or the energy source, has been removed from the article so as to prevent unintentional functioning during transport.
- ⑥ A small oxygen generator intended for personal use may be carried as checked baggage only, provided:
 - The generator without its packaging shall be capable of withstanding a 1.8 meter drop onto a rigid, **non-resilient**, flat and horizontal surface, in the position most likely to produce damage, without loss of contents and without actuation;
 - The generator shall be equipped with an actuating device with at least two positive means of preventing unintentional actuation;
 - When actuated at a temperature of 20°C with the generator well insulated, the temperature of any external surface of the generator shall not exceed 100°C;
 - The generator shall be in the manufacturer's **original** packaging and this shall include a sealed outer wrapping or other means which can be taken as clear evidence that the generator has not been tampered with; and
 - The generator packaging is marked to indicate that it meets the above requirements.

9.1.4 IDENTIFICATION AND CLASSIFICATION

All dangerous goods are identified by proper shipping names and United Nations classification system number (UN number). Where a UN number has not yet been assigned, a temporary identification number (ID number) in the 8 000 series is assigned by IATA. A complete list of UN or ID numbers and shipping names is given in section 4 of the IATA DGR.

Dangerous goods are assigned to one or more of nine UN hazard classes which relate to the type of hazard. The dangerous goods in classes 1, 2, 4, 5 and 6 are further subdivided into hazard divisions. The dangerous goods in class 1, are also subdivided into one of thirteen compatibility groups A, B, C, etc.

The nine UN hazard classes and their divisions are:

CLASS		DIVISION
1	Explosives	1.1 • Articles and substances having a mass explosion hazard 1.2 • Articles and substances having a projection hazard but not a mass explosion hazard 1.3 • Articles and substances having a fire hazard, a minor blast hazard and/or a minor projection hazard but not a mass explosion hazard 1.4 • Articles and substances presenting no significant hazard 1.5 • Very insensitive substances having a mass explosion hazard 1.6 • Extremely insensitive articles which do not have a mass explosion hazard
2	Gases	2.1 • Flammable gas 2.2 • Non-flammable, non-toxic gas 2.3 • Toxic gas
3	Flammable liquids	
4	Flammable solids	4.1 • Flammable solids 4.2 • Substances liable to spontaneous combustion 4.3 • Substances which, in contact with water, emit flammable gases
5	Oxidizing substances and organic peroxides	5.1 • Oxidizers 5.2 • Organic peroxides
6	Toxic (poisonous) and infectious substances	6.1 • Toxic substances 6.2 • Infectious substances
7	Radioactive material	
8	Corrosives	
9	Miscellaneous dangerous goods	

For packing purposes, dangerous goods in classes 3, 4, 5, 6, 8 and 9 are assigned to one of three UN packing groups according to the degree of hazard they present:

- Packing group I: great danger;
- Packing group II: medium danger; and
- Packing group III: minor danger.

9.1.5 PACKING, MARKING AND LABELLING

9.1.5.1 Packing

The shipper is responsible for all aspects of the packing, marking and labelling of dangerous goods in compliance with the IATA DGR.

Dangerous goods shall be packed in well constructed packagings of good quality which will withstand the conditions normal to transport by air. These packagings will be constructed such that when properly packed and closed for shipment they will not leak because of changes in temperature, humidity or pressure, e.g. resulting from change in altitude, or because of vibration.

9.1.5.2 Marking

There are two types of markings:

- Markings which identify the design or specification of a packaging irrespective of contents. These markings are normally applied by the packaging manufacturer, but are still ultimately the responsibility of the shipper; and
- Markings which identify the use of a particular packaging for a particular shipment, e.g. indication of contents, UN or ID number, name and address of shipper and consignee, etc.

9.1.5.3 Labelling

There are two types of labels:

- Hazard labels (in the shape of a square set at 45°); and
- Handling labels (in various rectangular shapes).

The various labels are reproduced on the reverse side of the Martinair NOTOC forms.

9.1.6 **LOADING**9.1.6.1 **General**

A distinction is made between:

- (a) **Articles** of substances and **net quantities per package acceptable on passenger aeroplanes**.
- (b) **Articles or substances** and **net quantities per package acceptable on Cargo Aircraft Only (CAO label)**.

The consignments under (a) will be loaded on:

- Passenger aeroplanes: in lower deck compartments only; or
- Cargo aeroplanes: in lower deck compartments or on the main deck.

The consignments under (b) may only be loaded on the main deck of cargo aeroplanes and positioned such that they can be seen, handled and, where size and weight permit, separated from other cargo during flight.

This accessibility requirement in flight is not required for:

- Flammable liquids (doss 3) of packing group III. without subsidiary risks;
- Toxic and infectious substances (class 6);
- Radioactive materials (class 7); and
- Miscellaneous dangerous goods (class 9).

9.1.6.2 **Radioactive material**

Due to the characteristics of radioactive material a number of additional provisions are applicable. apart from the general provisions for dangerous goods.

Radioactive materials are articles or substances which spontaneously and continuously emit ionizing radiation which can be harmful to the health of humans and animals and can affect hatching eggs and undeveloped photographic plates or films. This type of radiation can only be detected and measured with suitable instruments,

A convenient unit for indication of the radiation level of a package or overpack is called the Transport Index (TI). The TI is a dimensionless number assigned to a package or overpack indicating the relative amount of radiation measured at 1 meter from the external surface of that package or overpack.

Packages and overpacks containing radioactive material are assigned to one of three categories:

- | | |
|------------------------|---|
| Category I - white: | Radiation level on the external surface is negligible. (If the measured TI is not greater than 0.05 the value may be quoted 0). |
| Category II - yellow: | TI is more than 0 but not more than 1. |
| Category III - yellow: | TI is more than 1 but not more than 10.
If the TI is more than 10 the radioactive material will be carried under category III - yellow and also under exclusive use. |

Categories II and III will be separated from persons, animals, hatching eggs and undeveloped films. On a passenger aeroplane they may only be loaded in the lower deck compartments. On a cargo aeroplane they may be loaded in the lower deck compartments or on the main deck.

The minimum separation distances to be applied are shown in OM Part B. These distances are to be measured from the external surface of the packages, overpacks or containers to the nearest inside surface of crashnet, partition, or floor of cabin or flight deck.

9.1.6.3 Incompatible dangerous goods

Packages containing dangerous goods which might react dangerously with each other will not be stowed on a pallet or on an aeroplane next to each other or in a position that would allow interaction between them in the event of leakage. As a minimum, segregation will be observed as given in the following segregation table.

Division 4.1 and classes 6 and 9 are not included in this table as they do not require segregation from other classes of dangerous goods.

An "x" indicates that packages containing these classes/divisions of dangerous goods shall be segregated.

A --- indicates that packages containing these classes/divisions of dangerous goods do not require segregation.

Class or Division of primary hazard	1	2	3	4	2 4.2	3 4.3	5	7	8
1	①	②	②	②	②	②	②	x	x
2	②	-	-	-	-	-	-	-	-
3	②	-	-	-	-	-	x	-	-
4.2	②	-	-	-	-	-	x	-	x
4.3	②	-	-	-	-	-	x	-	x
5	①	-	x	x	x	x	-	-	x
7	x	-	-	-	-	-	-	-	x
8	x	-	-	x	x	x	x	x	-

① Explosives belonging to the same compatibility group may be stowed together, regardless of the division number. Explosives which do not belong to the same compatibility group shall not be stowed together, whether or not they belong to the same division in the classification, except that compatibility groups C, D and E may be stowed together. However, explosives of division 1.4 compatibility group S may be stowed with other compatibility groups, except with compatibility groups A or L.

② Explosives other than those in division 1.4 compatibility group S shall not be stowed together with this class or division.

9.1.7 NOTOC

Whenever dangerous **goods** are **carried**, and prior to departure the commander will **be** Informed by means of a 'Special Load Notification to Commander', the **NOTOC**.

The NOTOC will contain the **following** information.

- **Air** Waybill number;
- Proper **shipping** name, **supplemented with** the technical name(s) if **appropriate**;
- UN or ID number;
- Class or division;
- Subsidiary risk if **appropriate**;
- In case of class 1, the compatibility group;
- Packing group as shown on **the Shippers Declaration**;
- Number of packages and the net quantity or gross mass **of each package**, except that this not apply to radioactive material or other **dangerous** goods where the net quantity or gross **mass** is not **required** on the shipper's declaration:
- For **radioactive material the category and transport Index**;
- Indication whether the package shall be carried on Cargo Aircraft Only;
- **ICAO** emergency drill code;
- Loading details (pallet or container **number** and location **on board**);
- The aerodrome **at** which the **packages are to be** unloaded; **and**
- Where applicable, an indication that the dangerous **goods** are **being** carried under a **State** exemption.

When no dangerous goods are loaded, a NOTOC will **be** Issued stating 'Nil Dangerous **Goods**'. A NOTOC will also be issued when perishables, live animals or other cargo, which needs special attention, is **loaded**.

The NOTOC shall be readily available to the flight crew during flight. It should be stowed in the holder on the **lefthand side** of the pedestal and retained until the cargo for the last destination mentioned on the NOTOC is offloaded.

9.1.8 EMERGENCYRESPONSE

9.1.8.1 Considerations

In the event of an occurrence during flight involving dangerous **goods**, the following shall be **considered**:

- Complete the appropriate aeroplane emergency procedures;
- Land as soon **as** practicable;
- Switch on the no smoking sign;
- Select the recirculation fans off;
- Select the air **conditioning** packs at maximum capacity;
- Turn off non-essential electrical power;
- Determine source of smoke/fire/fumes, if **possible**;
- **Do not use water** on a spillage or when fumes are present;
- If the situation permits, notify ATC of at least the UN number of any **relevant** dangerous **goods being** carried: and

- If an incident has arisen in a cargo compartment, passengers and crew should be disembarked after landing before opening the cargo compartment doors. These doors should not be opened before RFF services are present.

9.1.8.2 Dangerous goods in the passenger cabin

Apart from the exceptions listed in OM-A 9.1.3.3, dangerous goods are not permitted in the passenger cabin. Nevertheless, dangerous goods may be carried into the cabin by passengers who are unaware of, or deliberately ignore the requirements for the carriage of dangerous goods.

Dangerous goods occurrences in the passenger cabin shall be dealt with by the cabin crew. It is essential that the cabin crew coordinate their actions with the flight crew.

(a) Procedures *before flight*

As long as the aeroplane is parked, suspected dangerous goods may be left behind. When, before the flight commences, the presence of dangerous goods is established, the senior cabin crew member shall be informed, who in consult with the commander and station manager can make arrangements for removal of the dangerous goods from the aeroplane.

(b) Procedures *during flight*

During flight there are more opportunities to establish the presence of dangerous goods. Opening of bags and cases during flight may show dangerous goods directly, but normally nothing will be noticed until an actual problem with the dangerous goods item arises.

Possible problems can be recognized by:

- Bad smell or odour;
- Wet spots on clothes, seat cushion or carpet;
- Abnormal noise (e.g. escaping gas); or
- Ultimately fire or smoke.

If a good is suspected to be dangerous, the passenger shall be asked to identify the item and to explain the nature of it. Unless it is obvious that a dangerous goods item in its present spot and packing does not constitute any hazard, resolute actions are of prime importance.

If an item is identified as dangerous:

- The commander shall be informed immediately;
- Smoking shall be stopped; and
- The cabin crew shall use the dangerous goods kit and proceed according to the instructions contained in this kit.

9.1.8.3 Dangerous goods in the underfloor cargo compartments

Spillage or leakages are unlikely to be detected during flight unless they cause noticeable fumes in the cabin or flight deck. In the event of leakage, the air in the cabin and flight deck may become flammable, irritating or toxic. The following shall be considered:

- The flight crew should use 100% oxygen; and
- Wherever possible the Passengers should be provided with wet towels or cloths for use over the nose and mouth.

9.1.8.4 Dangerous goods in the main deck cargo compartment**(a) incidents**

In the event of an incident occurring involving dangerous goods in the main deck compartment, an assessment shall be made of the practicality of attempting direct physical intervention. On MD-11, when apart from the minimum flight crew no other persons are on board, no direct intervention shall be attempted.

The following actions shall be considered:

- Attempt to locate the source of the incident and identify whether there are fumes or smoke or evidence of spillage or leakage;
- Identify the dangerous goods involved by the name and/or UN number of these goods;
- Use the NOTOC to find the emergency drill code assigned to the particular item; and
- Continue according (b) below.

(b) Emergency response drills

The emergency response drills as given in the following table are for guidance of flight crews.

The drill Code assigned to an item of dangerous goods consists of a number from 1 to 10 plus one or two letters. In some cases the guidance given by the drill number may be further refined by the information given by the drill letter(s). The drill letters are shown separately at the end of the table. They indicate other possible hazards of the substance.

Drill no. 1	<p>Inherent risk: Risk to aeroplane: Risk to occupants: Spill or leak procedure: Fire fighting procedure:</p> <p>Additional considerations:</p>	<p>Explosion may cause structural failure Fire and/or explosion As indicated by the drill letter(s) Use 100% oxygen; no smoking All agents according to availability; use standard fire procedure. Possible abrupt loss of pressurization</p>
Drill no. 2	<p>Inherent risk: Risk to aeroplane: Risk to occupants: Spill or leak procedure: Fire fighting procedure:</p> <p>Additional considerations:</p>	<p>Gas, non-flammable; pressure may create hazard in fire Minimal. As indicated by the drill letter(s) Use 100% oxygen; maximum ventilation for 'A', 'I' or 'P' drill letter. All agents according to availability; use standard fire procedure. Possible abrupt loss of pressurization</p>
Drill no. 3	<p>Inherent risk: Risk to aeroplane: Risk to occupants: Spill or leak procedure: Fire fighting procedure:</p> <p>Additional considerations:</p>	<p>Flammable liquid or solid. Fire and/or explosion. Smoke, fumes and heat, and as indicated by the drill letter(s). Use 100% oxygen; maximum ventilation; no smoking; minimum electricals. All agents according to availability; no water on 'W' drill letter Possible abrupt loss of pressurization.</p>
Drill no. 4	<p>Inherent risk: Risk to aeroplane: Risk to occupants: Spill or leak procedure: Fire fighting procedure:</p> <p>Additional considerations:</p>	<p>Spontaneously combustible or pyrophoric when exposed to air. Fire and/or explosion. Smoke, fumes and heat, and as indicated by the drill letter(s). Use 100% oxygen; maximum ventilation. All agents according to availability; no water on W drill letter. Possible abrupt loss of pressurization; minimum electricals if 'F' or 'H' drill letter.</p>
Drill no. 5	<p>Inherent risk: Risk to aeroplane: Risk to occupants: Spill or leak procedure: Fire fighting procedure:</p> <p>Additional considerations:</p>	<p>Oxidizer, may ignite other materials, may explode in heat of a fire. Fire and/or explosion, possible corrosion damage. Eye, nose and throat irritation; skin damage on contact. Use 100% oxygen; maximum ventilation. All agents according to availability; no water on W drill letter. Possible abrupt loss of pressurization.</p>
Drill no. 6	<p>Inherent risk: Risk to aeroplane: Risk to occupants: Spill or leak procedure: Fire fighting procedure:</p> <p>Additional considerations:</p>	<p>Poison, may be fatal if inhaled, ingested, or absorbed by skin. Contamination with poisonous liquid or solid. Acute poisoning, effects may be delayed. Use 100% oxygen; maximum ventilation; do not touch without gloves. All agents according to availability; no water on W drill letter. Possible abrupt loss of pressurization; minimum electricals if 'F' or 'H' drill letter.</p>
Drill no. 7	<p>Inherent risk: Risk to aeroplane: Risk to occupants: Spill or leak procedure: Fire fighting procedure:</p> <p>Additional considerations:</p>	<p>Radiation from broken/unshielded packages. Contamination with spilled radioactive material. Exposure to radiation, and personnel contamination. Do not move packages; avoid contact. All agents according to availability. Call for a qualified person to meet the aeroplane.</p>

Drill no. 8	Inherent risk Risk to aeroplane Risk to occupants. Spill or leak procedure: Fire fighting procedure: Additional considerations:	Corrosive, fumes disabling if inhaled or in contact with skin Possible corrosion damage Eye, nose and throat irritation; skin aamage on contact: Use 100% oxygen; maximum ventilation; do not touch without gloves. All agents according to availability, no water on "W" drill letter Possible abrupt loss of pressurization, minimum electrics if "F" of "H" drill letter.	
Drill no. 9	Inherent nsk: Risk to aeroplane: Risk to occupants: Spill or leak procedure: fire fighting procedure: Additional considerations:	No general inherent nsk. As indicated by the drill letter. As indicated by the drill fetter. Use 100% oxygen; maximum ventilation if 'A' drill letter All agents according to availability. None.	
Drill no. 10	Inherent nsk: Risk to aeroplane: Risk to occupants: Spill or leak procedure: Fim fighting procedure: Additional considerations:	Gas, flammable, high fim risk if any ignition source present. Fire and/or explosion. Smoke, fumes and heat, and as indicated by the drill letter(s) Use 100% oxygen; maximum ventilation; no smobng; minimum electrics. All agents according to availability. Possible abrupt loss of pressurization.	
Drill letter	Additional risk	Drill letter	Additional nsk
A	Anaesthetic	M	Magnetic
C	Corrosive	N	Noxious
E	Explosive	P	Poison
F	Flammable	S	Spontaneously combustible or pyrophoric
H	Highly ignitable	W	If wet gives off poisonous or flammable gas
L	Irritant Tear producing Other risk low or none	X	Oxidizer

9.1.8.5 Reporting

The commander shall, in all cases where an emergency response procedure was followed, transmit an Air Safety Report to OCC immediately, preferably by fax.

The Air Safety Report should include as much information as possible (refer to OM-A 11.3). Copies of the relevant documents such as the NOTOC and any photographs taken should be attached to the report.

9.2 WEAPONS

9.2.1 CARRIAGE OF WEAPONS AND SPORTING AMMUNITION

- (a) Except as provided for in (c) below, **no person shall be allowed to carry weapons such as tire-arms, daggers, stilettos and ammunition in their carry-on baggage or on their person on board the aeroplane.** Except for ammunition, such articles, when found during security checks, will be stowed on board in a special envelope, which will be identified by a baggage tag showing name and address of the person. After arrival at the destination the articles will be returned to the person.
- (b) Ammunition (cartridges) for sporting purposes and well packed unloaded sporting guns, e.g. small bore rifles, shotguns and pistols, may be carried as checked baggage in the cargo compartments in accordance with OM-A 9.1.3.3 (Dangerous Goods exempted).
- (c) Notwithstanding (a) and (b) above, security staff performing a duty on board as per OM-A 4.1.3 and authorized by Martinair, may be permitted to carry a loaded fire-arm and ammunition after he has duly identified himself at check-in time.

9.2.2 CARRIAGE OF WEAPONS OF WAR AND AMMUNITION OF WAR

- (a) Weapons of war and ammunition of war shall not be transported unless an approval to do so has been granted by all States concerned. In this context, States which may be concerned with granting approvals are those of origin, transit, overflight and destination of the consignment and of the operator. If required, Logistics Department will arrange the appropriate permissions.
- (b) Weapons of war and ammunition of war will be stowed in the aeroplane in a place which is inaccessible to passengers during flight.
- (c) Notwithstanding (a) and (b) above and in accordance with the Netherlands Department of Foreign Affairs (Buitenlandse Zaken), military personnel travelling on civil aircraft are to be regarded as civilians. Their small arms and ammunition will be carried in a cargo compartment and may then be regarded as personal baggage for which the approval of (a) above is not considered applicable.
- (d) Whenever weapons of war and ammunition of war are carried, the commander will be informed by a NOTOC. •